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FAA-99-5401-50

Era Aviation, Inc.
6160 Carl Brady Drive
Anchorage, Alaska
99502

August 2, 1999

U.S. Department of Transportation Dockets
Docket No. FAA- 1999-540 1
400 Seventh St. SW.
Room Plaza 401
Washington, DC 20590

FAA
9-NPRM-CMTS@faa.dot.gov
Subject: Rules Docket FAA- 1999-540 1

Richard A. Lund
Director Quality Control

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Dear Sir or Madam:

The following comments refer to the NPRM on 14 CFR Parts 119, 12 1, 129, 13 5, and 183, Dated April 2, 1999 Docket No. FAA-l 999-540 1.

Era Aviation is a regional air carrier headquartered in Anchorage, Alaska. We currently operate 18 fixed wing and over 95 helicopters under 14 CFR Parts 12 1 and 13 5, both domestically and internationally.

The primary aircraftoperated by Era Aviation under Part 12 1 passenger carrying operations affected by this rulemaking are five Convair 340/440s, STC SA4- 1100, designated as CV-580, and nine Bombardier (DeHavilland) DHC-6-100/200/300 series aircraft.

Part 121.368

Era Aviation believes that Air Carriers along with the FAA are already responsible for determining the continuing airworthiness of our aircraft during heavy maintenance in accordance with FAR 12 1.363 “Responsibility for airworthiness.” The FAA already mandates that FAA Airworthiness Safety Inspectors (ASI) perform on-site aircraft records reviews and inspections during heavy maintenance, Structural Integrity Program Inspections (SIP), and Corrosion Prevention and Control Program Inspections (CPCP) whenever performed on aging aircraft. Air Carrier’s already must make all records available to the FAA in accordance with FAR 12 1.380(d) “Maintenance recording requirements.” The added reviews and inspections in this NPRM are redundant to FAA’s current regulations and policies, and would only add to the cost of maintenance while providing no added safety benefits.

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Era Aviation agrees that the FAA could not support the new requirements without the assistance of DARs, however, this again only increases the cost of maintenance without any added safety benefit. It also defeats the purpose of performing such inspections by FAA personnel, which now allows Air Carrier assigned ASIs first hand involvement in the Carrier's aircraft maintenance operations.

Era Aviation also objects to the statutory 60 day notification of FAA of heavy maintenance. Era Aviation already provides 6 months projected notification for heavy maintenance. However, the scheduled dates tend to change quickly as our peak summer utilization changes rapidly. Even though we often extend our heavy maintenance, which would still be within the 60 day notice, at times utilization is much heavier than anticipated and checks must be accomplished much earlier than projected. If notification is mandated, a 30 day notice would be much more appropriate.

Part 121.370

The FAA's proposal to mandate retirement of non-damage tolerant aircraft is totally unacceptable. While service experience may not cover all the same aspects as damage tolerant engineering, the same can be said of the reverse. Even the latest technology aircraft experience unexpected structural problems, that only in-service experience and operating history reveals as our aircraft age. No engineering is infallible.

Convair 580

The Convair 580 has had excellent engineering and product support over it's 45 year history. This aircraft has well proven Structural Integrity Document (SID) and Corrosion Inspection Programs (CIP). Both programs are actively monitored by the FAA and OEM.

In 1989 Era Aviation implemented General Dynamics Structural Integrity Document mandated through FAA AD88-22-06 and later revised through AD92-06-06. This is a very extensive Structural Inspection Program that requires continuing correspondence with the manufacturer to assess revisions in the form of additional Inspection Tasks or adjustment of intervals. Because this aircraft was not designed to damage tolerance criteria *cracks must be repaired before continued operation.* All repairs are FAA DER approved and are coordinated through the FAA Los Angeles ACO.

On January 12, 1993, a Corrosion Inspection Program was mandated by AD92-25-13. Again this is a very extensive program, requiring FAA DER approved repairs. Between these two programs, SID and CIP, we have added 132 new Inspection Tasks that are specific to the Aging Aircraft Safety Act.

Airworthiness Directive AD90-13- 13 was mandated December 1, 1989, and required the inspection and repair of the Fuselage Beltframes. This Inspection Program was very labor intensive, requiring an average of 1500 man-hours to complete. Major repairs included the installation of new Beltframes and very extensive doublers. Repetitive inspections are mandated by the SID program.

Airworthiness Directive AD74- 16-01 was mandated August 2, 1974, and required the inspection and repair of the Fuselage Structure and Stringers. This AD is repetitive and is

very labor intensive, requiring an average of 500 man-hours every 5,000 hours of operation to complete. Major repairs included the installation and repair of stringers and stringer clips.

There are numerous repetitive ADs covering Main and Nose Landing Gear attachments, Wing Spar inspections, and Window and Window Frame inspections based on landing and pressure cycles, all of which attest to a very well maintained aircraft.

Only one major revision has been made to the SID and CIP programs since inception, a testament to the forethought that went into their development and the programs ability to accomplish their goals. Man-hours expended on Era Aviation aircraft during heavy maintenance has doubled since incorporation of these two significant programs, proving structural and corrosion findings are being discovered and addressed in a timely manner during on-going maintenance operations.

Bombardier (DeHavilland) DHC-6 Series (Twin Otter)

The DeHavilland Twin Otter was engineered to design life limits as specified in DeHavilland PSM 1-6- 11 "DHC-6 Twin Otter Structural Components Service Life Limits Manual," and approved by the FAA in accordance with Type Certificate Data Sheets (TCDS) No. A9EA and AD 83-02-02. While the FAA is correct in that Transport Canada has validated the structural life limit of 66,000 hours or 132,000 flights, the FAA has not approved this Revision 4 of PSM 1-6-l 1, dated August 6, 1996. The FAA has only approved Revision 2, dated March 6, 1978. Era Aviation does not understand why the FAA has not revised their approvals to match that of Transport Canada, which has current maintenance bilateral agreements with the U.S.

There is currently no replacement aircraft being manufactured that can replace the simple *un-pressurized* ruggedness of a Twin Otter. Era Aviation utilizes this aircraft in scheduled bush and special configuration charter operations. Essential service is provided to many Alaskan bush communities that have no other source for air transportation, including transport of emergency supplies, and individuals with medical emergencies. To relegate this aircraft to Part 135 cargo only operations would be a great disservice to the Alaskan people while degrading safety, since these aircraft would be replaced by 9 or less single engine, single pilot aircraft.

Era Aviation appreciates the FAA's approval of allowing air carriers to develop their own damage tolerant inspection and repair procedures. However, this would be impossible for Era Aviation to accomplish both economically and physically. We do not have the engineering capability to perform such a task, while OEM data is proprietary and not available.

Appendix N to Part 121

Appendix N to Part 12 1 list the Design Life goal for the DeHavilland Twin Otter as 33,000 hours. The FAA is in error of quoting only the 300 series aircraft wing life. Wing Life, Wing Strut Life, and Fuselage Frame limits vary by model and serial number. Certain Twin Otter 100 and 200 series wings can be operated to 49,000 hours and 98,000 cycles.

Conclusion

While Era Aviation supports FAA's efforts to improve maintenance of aging aircraft, this proposed rulemaking will do more harm than good. Implementation of Structural Integrity Inspections and Corrosion Inspections along with new technology NDT procedures has improved maintenance practices and procedures dramatically. Continually updating and revising these programs will assure the effectiveness of these programs for years to come. Economics and parts availability should continue to mandate retirement times. Mandating redundant inspections and life limiting aircraft beyond that of economics will not increase the safety of aircraft operations.

Era Aviation proposes new rulemaking to mandate Structural Integrity and Corrosion Control Programs, instead of Airworthiness Directive action, supplemented with comprehensive structural and corrosion reliability programs for non-damage tolerant aircraft. Era Aviation supports the proposal submitted by the Regional Airline Association (RAA) in establishing and recognizing structural integrity inspections as an alternate to damage tolerant programs. We believe these programs would provide an equivalent means of compliance with the Aging Aircraft Safety Act.

Respectfully Yours;

Richard A. Lund
Director Quality Control
Era Aviation, Inc.